



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbalà  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugalsky  
Donald J. Featherstone  
Michael V. Messinger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Jeffrey T. Helvey  
Heidi L. Kraus  
Albert L. Ferro  
Donald R. Banowitz  
Peter A. Jackman  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Eldora Ellison Floyd  
Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaton  
Theodore A. Wood  
Elizabeth J. Haanes

Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Lhulier  
Rae Lynn P. Guest  
George S. Bardmesser  
Daniel A. Klein  
Jason D. Eisenberg  
Michael D. Specht  
Andrea J. Kamage  
Tracy L. Muller  
LuAnne M. DeSantis  
Ann E. Summerfield  
Aric W. Ledford  
Helene C. Carlson  
Timothy A. Doyle  
Gaby L. Longworth  
Lori A. Gordon  
Nicole D. Dretar

Ted J. Ebersole  
Jyoti C. Iyer  
Laura A. Vogel

**Registered Patent Agents**  
Karen R. Markowicz  
Nancy J. Leith  
Matthew J. Dowd  
Aaron L. Schwartz  
Katrina Yujian Pei Quach  
Bryan L. Skelton  
Robert A. Schwartzman  
Teresa A. Colella  
Jeffrey S. Lundgren  
Victoria S. Rutherford  
Michelle K. Holoubek  
Robert H. DeSelms  
Simon J. Elliott

Julie A. Heider  
Mia Mukherjee  
Scott M. Woodhouse  
Michael G. Penn  
Christopher J. Walsh

**Of Counsel**

Kenneth C. Bass III  
Evan R. Smith  
Marvin C. Guthrie

\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice Limited to  
Federal Agencies

September 22, 2004

**WRITER'S DIRECT NUMBER:**  
(202) 772-8615

**INTERNET ADDRESS:**  
FRANKC@SKGF.COM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Mail Stop: Amendment**

Re: U.S. Utility Patent Application  
Application No. 09/705,940; Filed: November 6, 2000  
For: **Dry Powder Cells and Cell Culture Reagents and Methods of  
Production Thereof**  
Inventors: Fike *et al.*  
Our Ref: 0942.4290006/RWE/FRC

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fee Transmittal Form (PTO/SB/17);
2. Fifth Supplemental Information Disclosure Statement;
3. Listing of the cited documents on Form PTO-1449 (7 sheets);
4. A copy of each of the thirty-two (32) cited documents on Form PTO-1449;
5. Credit Card Payment Form (PTO-2038) in the amount of **\$180.00** to cover the IDS fee; and
6. Return postcard.

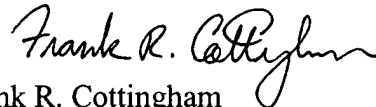
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
September 22, 2004  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Frank R. Cottingham  
Attorney for Applicants  
Registration No. 50,437

FRC/pcd  
Encls.

312696v1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Fike *et al.*

Appl. No.: 09/705,940

Filed: November 6, 2000

For: **Dry Powder Cells and Cell  
Culture Reagents and Methods of  
Production Thereof**

Confirmation No.: 7464

Art Unit: 1636

Examiner: Lambertson, D.

Atty. Docket: 0942.4290006/RWE/FRC

**Fifth Supplemental Information Disclosure Statement**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§1.56, 1.97 and 1.98.

The numbering of this Fifth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Fourth Supplemental Information Disclosure Statement filed on January 29, 2004, in connection with the above-captioned application. A copy of each document is also provided.

In accordance with 37 C.F.R. § 1.98(a)(3), Applicants' undersigned representative submits the following, in regards to the non-English language documents **AO5** and **AP5** cited on Form PTO-1449:

Document **AO5**, Japanese Patent No. 59-501933, is in the Japanese language. An unverified English language abstract of document **AO5** is attached as document **AR19**.

Document **AP5**, Japanese Patent No. 60-248172, is in the Japanese language. An unverified English language abstract of document **AP5** is attached as document **AS19**.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is

09/23/2004 FHETEK11 00000035 09705940 not in issue Applicants have listed publication dates on the attached PTO-1449 based on

01 FC:1806

180.00 0P

information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

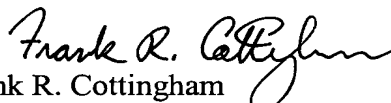
This Fifth Supplemental Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application. Attached is a PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

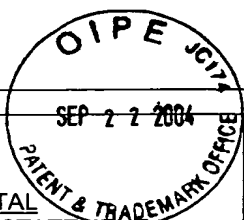
Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Frank R. Cottingham  
Attorney for Applicants  
Registration No. 50,437

Date: SEPT. 22, 2004  
1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

FORM PTO-1449  
FIFTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
0942.4290006APPLICATION NO.  
09/705,940FIRST NAMED INVENTOR  
Fike et al.FILING DATE  
November 6, 2000ART UNIT  
1636

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA4	2,835,586	05/20/1958	Peebles, D.	99	56	07/27/1953
	AB4	4,053,642	10/11/1977	Hup et al.	426	36	06/12/1975
	AC4	4,673,649	06/16/1987	Boyce et al.	435	240	07/15/1983
	AD4	5,773,061	06/30/1998	Getler et al.	426	285	05/15/1996
	AE4	6,140,121	10/31/2000	Ellington et al.	435	374	10/17/1996
	AF4	6,627,426	09/30/2003	Biddle et al.	435	243	05/23/2000
	AG4	2004/0087022	05/06/2004	Fike et al.	435	404	10/16/2003
	AH4	2003/0153079	08/14/2003	Fike et al.	435	404	12/02/2002
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

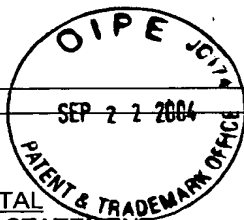
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL5	WO 84/04107	10/25/1984	WIPO			Yes No
	AM5	WO 95/00031	01/05/1995	WIPO			Yes No
	AN5	WO 95/13865	05/26/1995	WIPO			Yes No
	AO5	JP 59-501933	11/22/1984	Japan			Yes No x
	AP5	JP 60-248172	12/07/1985	Japan			Yes No x

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR		
	AS	<u>13</u>	Barritault, D., et al., "Is There a Ubiquitous Growth Factor in the Eye? Proliferation Induced in Different Cell Types by Eye-Derived Growth Factors," <i>Differentiation 18</i> : 29-42, Springer-Verlag (1981).
	AT	<u>13</u>	BBL Manual of Products and Laboratory Procedures, Fifth Edition, pp. 161-162 (1973).

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940
		FIRST NAMED INVENTOR Fike et al.	
		FILING DATE November 6, 2000	ART UNIT 1636

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

### FOREIGN PATENT DOCUMENTS

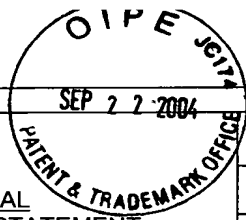
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

### OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>14</u>	Cohen, S., "Isolation of a Mouse Submaxillary Gland Protein Accelerating Incisor Eruption and Eyelid Opening in the New-born Animal," <i>J. Biol. Chem.</i> 237: 1555-1562, The American Society of Biological Chemistry, Inc. (1962).
	AS	<u>14</u>	Fassolitis, A.C., <i>et al.</i> , "Serum Substitute in Epithelial Cell Culture Media: Nonfat Dry Milk Filtrate" <i>Applied and Environmental Microbiology</i> 42:200-203, American Society for Microbiology (1981).
	AT	<u>14</u>	Fike, R., <i>et al.</i> , "Advanced Granulation Technology (AGT™). An alternate format for serum-free, chemically-defined and protein-free cell culture media," <i>Cytotechnology</i> 36: 33-39, Kluwer Academic Publishers (2001).

EXAMINER	DATE CONSIDERED
----------	-----------------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



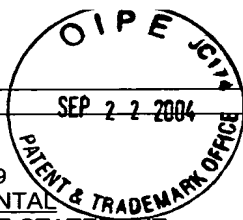
Page 3 of 7							
FORM PTO-1449 FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">ATTY. DOCKET NO. 0942.4290006</td> <td style="width: 50%;">APPLICATION NO. 09/705,940</td> </tr> <tr> <td colspan="2">FIRST NAMED INVENTOR Fike et al.</td> </tr> <tr> <td>FILING DATE November 6, 2000</td> <td>ART UNIT 1636</td> </tr> </table>	ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940	FIRST NAMED INVENTOR Fike et al.		FILING DATE November 6, 2000	ART UNIT 1636
ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940						
FIRST NAMED INVENTOR Fike et al.							
FILING DATE November 6, 2000	ART UNIT 1636						

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	<u>15</u>	Gilcrest, B.A., <i>et al.</i> , "Characterization and Partial Purification of Keratinocyte Growth Factor From the Hypothalamus," <i>J. Cellular Physiology</i> 120: 377-383, Alan R. Liss, Inc. (1984).
	AS	<u>15</u>	Lambert, K.J., and Birch, J.R., "Cell Growth Media," in <i>Animal Cell Biotechnology</i> , Vol. 1, pp. 85-122. Spier, R. E., and Griffiths, J. B., Eds., Academic Press, Inc., London (1985).
	AT	<u>15</u>	Maciag, T., <i>et al.</i> , "An endothelial cell growth factor from bovine hypothalamus: Identification and partial characterization," <i>Proc. Natl. Acad. Sci. USA</i> 76: 5674-5678, National Academy of Sciences (1979).

EXAMINER	DATE CONSIDERED
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



Page 4 of 7	
FORM PTO-1449 FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	
ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940
FIRST NAMED INVENTOR Fike et al.	
FILING DATE November 6, 2000	ART UNIT 1636

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>16</u>	Maciag, T., <i>et al.</i> , "An Endocrine Approach to the Control of Epidermal Growth: Serum-Free Cultivation of Human Keratinocytes," <i>Science</i> 211: 1452-1454, American Association for the Advancement of Science (1981).
	AS	<u>16</u>	Peehl, D. M., and Ham, R. G., "Growth and Differentiation of Human Keratinocytes without a Feeder Layer or Conditioned Medium," <i>In Vitro</i> 16: 516-525, Tissue Culture Association (1980).
	AT	<u>16</u>	Radominski, R., <i>et al.</i> , "Production-Scale Qualification of a Novel Cell Culture Medium Format," <i>BioPharm</i> 14: 34-39, Invitrogen Corporation (July 2001).

EXAMINER	DATE CONSIDERED
----------	-----------------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
0942.4290006APPLICATION NO.  
09/705,940FIRST NAMED INVENTOR  
Fike et al.FILING DATE  
November 6, 2000ART UNIT  
1636

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

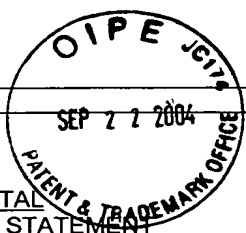
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>17</u>	Ringer, S., "Concerning the Influence Exerted by Each of the Constituents of the Blood on the Contraction of the Ventricle," <i>J. Physiology</i> 3: 380-393, Cambridge Scientific Instrument Company's Works (1880).
	AS	<u>17</u>	Sigma-Aldrich Catalogue pp. 1553, 1634 (1996).
	AT	<u>17</u>	Tritsch, G. L., and Moore, G. E., "Spontaneous Decomposition of Glutamine in Cell Culture Media," <i>Exp. Cell Res.</i> 28: 360-364, Academic Press (1962).

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449  
FIFTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
0942.4290006APPLICATION NO.  
09/705,940FIRST NAMED INVENTOR  
Fike et al.FILING DATE  
November 6, 2000ART UNIT  
1636

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

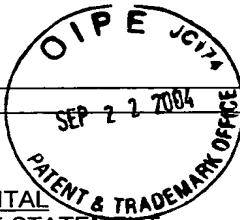
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>18</u>	Wang, R.J., and Nixon, B. T., "Identification of Hydrogen Peroxide as a Photoproduct Toxic to Human Cells in Tissue-Culture Medium Irradiated with "Daylight" Fluorescent Light," <i>In Vitro</i> 14: 715-722, Tissue Culture Association (1978).
	AS	<u>18</u>	Waymouth, C., "Construction and Use of Synthetic Media," in Cells and Tissues in Culture, Vol. 1, pp 99-142. Willmer, E. N., Ed., Academic Press, NY (1965).
	AT	<u>18</u>	Waymouth, C., "Osmolality of Mammalian Blood and of Media for Culture of Mammalian Cells," <i>In Vitro</i> 6: 109-127, Tissue Culture Association (1970).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 7 of 7							
FORM PTO-1449 FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">ATTY. DOCKET NO. 0942.4290006</td> <td style="width: 50%;">APPLICATION NO. 09/705,940</td> </tr> <tr> <td colspan="2">FIRST NAMED INVENTOR Fike et al.</td> </tr> <tr> <td>FILING DATE November 6, 2000</td> <td>ART UNIT 1636</td> </tr> </table>	ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940	FIRST NAMED INVENTOR Fike et al.		FILING DATE November 6, 2000	ART UNIT 1636
ATTY. DOCKET NO. 0942.4290006	APPLICATION NO. 09/705,940						
FIRST NAMED INVENTOR Fike et al.							
FILING DATE November 6, 2000	ART UNIT 1636						

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

### FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

### OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	19	Unverified English language abstract for JP 59-501933 (Document AO5), available on line at <a href="http://www.p4.patolis.co.jp/service/e/HWWE036">www.p4.patolis.co.jp/service/e/HWWE036</a> (accessed August 26, 2004)
	AS	19	Unverified English language abstract for JP 60-248172 (Document AP5), available on line at <a href="http://www.p4.patolis.co.jp/service/e/HWWE036">www.p4.patolis.co.jp/service/e/HWWE036</a> (accessed August 26, 2004).
	AT		

EXAMINER	DATE CONSIDERED
----------	-----------------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

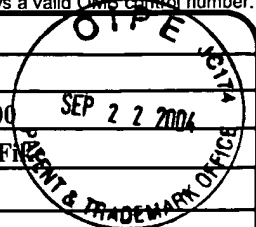
Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT (\$)** 180.00

## Complete if Known

Application Number 09/705,940  
 Filing Date November 6, 2000  
 First Named Inventor Richard Milton FRC  
 Examiner Name Lambertson, D.  
 Art Unit 1636  
 Attorney Docket No. 0942.4290006/RWE/FRC



## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other\*\* ☐ None

☐ \*\*Charge any deficiencies or credit any overpayments in the fees to Deposit Acct. No. 19-0036.

 Deposit Account Number 19-0036  
 Deposit Account Name Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$)			

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	- 20 **=	X	
Multiple Dependent	- 3 **=	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$)		

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180.00
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

180.00

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type) Frank R. Cottingham Registration No. 50.437 Telephone (202) 371-2600  
 Signature Frank R. Cottingham Date SEPT. 22, 2004

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.